REMARKS

In the Office Action, the Examiner indicated that claims 1 through 9 are pending in the application and the Examiner rejected all claims.

Claim Rejections, 35 U.S.C. §103

In item 4 on page 3 of the Office Action, the Examiner rejected claims 1 and 9 under 35 U.S.C. §103(a) as being unpatentable over Applicant Admitted Prior Art ("AAPA") and U.S. Patent No. 6,006,264 to Colby et al. ("Colby"). At item 6 on page 4 of the Office Action, the Examiner rejected claims 2-8 under 35 U.S.C. §103(a) as being unpatentable over AAPA in view of Colby and U.S. Patent No. 6,240,461 to Cielsak et al. ("Cielsak").

The Present Invention

The present invention provides a combined caching and hashing system whereby popular requests are handled by a front-end cache, and hashing is applied to the requests in the stream that were not handled by the front-end cache.

In a preferred embodiment, a web proxy cache is combined with a Level 7 switch, such that the web proxy cache services the popular requests from the cache based on the URL, i.e., based on the portion of the HTTP request following the domain name. The remaining requests are URL-hashed and then routed to the back-end server. This allows the requests that make it past the web proxy cache to still be routed to the back-end server cache and take advantage of the efficiencies provided therefrom.

In a more preferred embodiment, a Level 4 switch is placed in front of a plurality of web proxy caches, each of which are in turn placed in front of (or combined with) a respective Level 7 switch, each of which are connected to a respective server farm, so that incoming web requests are handled on a round robin basis before being sent to the web proxy cache, thus improving the throughput from the server farms to the requesting clients.

Applicant's Admitted Prior Art ("AAPA")

As set forth in the specification, applicant admits that, among others, server switches, hashing switches, caching, content-based routing, and load balancing are known.

U.S. Patent No. 6,006,264 to Colby et al.

U.S. Patent No. 6,006,264 to Colby et al. ("Colby") teaches a content-aware flow switch that intercepts a client content request in an IP network, and transparently directs the content request to a best-fit server. As set forth in column 5 of Colby, the content-aware flow switch "front ends" (i.e., intercepts all packets received from and transmitted by) a set of local web servers, constituting a web server farm.

U.S. Patent No. 6,240,461 to Cielsak et al.

U.S. Patent No. 6,240,461 to Cielsak et al. ("Cielsak") teaches a method for facilitating data transmission in a network. A first data request is received at a first intermediate platform, the first data request indicating a source platform and a destination platform. The first data

request is redirected by the first intermediate platform to a first cache platform associated with the

intermediate platform. Data corresponding to the first data request is transmitted from the first

cache platform to the source platform. The data indicates origination from the destination

platform.

The Examiner has not Established a *prima facie* Case of Obviousness

As set forth in the MPEP:

To establish a *prima facie* case of obviousness, there must be some suggestion or
motivation, either in the references themselves or in the knowledge generally
available to one of ordinary skilled in the art, to modify the reference or to
combine reference teachings.
MPEP 2143

The Examiner has failed to show the necessary suggestion in the prior art to modify the

teachings to achieved claimed a result of the present invention. Instead, the Examiner has used

impermissible hindsight to pick and choose from existing prior art and then assert that these

isolated teachings "could be easily adopted to and modified" (Examiner's rejection, page 3,

paragraph 5, lines 8-9) to arrive at the claimed function. Asserting that something "could" be

used in combination with something else to arrive at the present invention is a clear example of

impermissible hindsight. As set forth in by the Federal Circuit in *In re Fritch*,

"[I]t is impermissible to use the claimed invention as an instruction
manual or "template" piece together the teachings of the prior art
so that the claimed invention is rendered obvious...." 977 F.2d
1260 (Fed.Cir. 1992).

In the present situation, applicant has acknowledged that caching is known, that server switches are known and that URL hashing switches are known. The art cited by the Examiner contains examples of such known elements. What is novel and non-obvious about the present invention is combining the use of a front end cache with the hashing of requests that are not handled by the front-and cache. Nothing in the references cited by the Examiner gives any suggestion of such a combination. The fact that they "could" have been combined is irrelevant and is clearly based on hindsight.

The pending claims specifically recite a combined caching/hashing switch and/or a method of combining caching and hashing in a novel manner (*see*, lines 3 and 4 of claim 1, and lines 4-12 of claim 7). None of the cited prior art teach these novel features, and none of the cited prior art contains any suggestion of such a combination. Without such a suggestion, it is inappropriate to reject the claims as being obvious based on the cited prior art. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection of claim 1-9 under 35 U.S.C. §103.

Conclusion

The present invention is not taught or suggested by the prior art. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection of the claims. An early Notice of Allowance is earnestly solicited.

Enclosed herewith, in duplicate, is a Petition for extension of time to respond to the

Examiner's Action, and a Credit Card Payment Form authorizing the extension fee.   The

Commissioner is hereby authorized to charge any additional fees or credit any overpayment

associated with this communication to Deposit Account No. 19-5425.

Respectfully submitted

1/18/05
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